

CLAIMS

1. (Amended) A coolant for fuel cells that is used to cool down fuel cells, comprising:

5 a water-containing base material; and

a rust-preventive additive that functions to keep an electric conductivity of said coolant for fuel cells at a low level and to maintain a hydrogen ion exponent of said coolant for fuel cells in a substantially neutral level.

10

2. (Amended) A coolant for fuel cells in accordance with claim 1, wherein the base material is a solution mixture containing a glycol.

3. (Amended) A coolant for fuel cells in accordance with either one
15 of claims 1 and 2, wherein the rust-preventive additive includes at least one of an alkalescent additive and an acidulous additive.

4. (Amended) A coolant for fuel cells in accordance with either one
of claims 1 and 2, wherein the rust-preventive additive includes an
20 alkaline additive and an acidic additive.

5. (Amended) A coolant for fuel cells in accordance with claim 4,
wherein the alkaline additive is an ethanolamine series.

25 6. (Amended) A coolant for fuel cells in accordance with claim 5, wherein the ethanolamine series includes triethanolamine, diethanolamine, and monoethanolamine.

7. (Amended) A coolant for fuel cells in accordance with any one of
30 claims 4 to 6, wherein the acidic additive is selected out of the group

AMENDED SHEET

consisting of triazole compounds, phosphoric acid compounds, and organophosphoric acid compounds.

5 8. (Amended) A coolant for fuel cells in accordance with any one of claims 1 to 7, wherein the rust-preventive additive causes said coolant for fuel cells to have a hydrogen ion exponent of about 6 to 9.

10 9. (Amended) A coolant for fuel cells in accordance with any one of claims 1 to 8, wherein the rust-preventive additive causes said coolant for fuel cells to have a low electric conductivity of less than about 100 $\mu\text{S}/\text{cm}$.

10. (Amended) A coolant for fuel cells in accordance with any one of claims 1 to 9, wherein the rust-preventive additive especially has rust-preventive performance against aluminum material.

15
S
U
A
2
11. A coolant in accordance with claim 1, wherein the rust-preventive additive is a nonionic series substance.

20 12. A coolant in accordance with claim 11, wherein the nonionic series substance includes at least one of a saccharide and a nonionic surfactant.

25 13. A coolant in accordance with either one of claims 11 and 12, said coolant is decontaminated by a coolant decontamination system using either one of an ion exchange resin and a chelating resin.

14. A coolant in accordance with any one of claims 1 to 13, said coolant has undergone deoxidization.

30 15. A method of enclosing a coolant in accordance with any one of

AMENDED SHEET

claims 1 to 13 in a cooling circuit for a stack of fuel cells, said method comprising the steps of:

deoxidizing said coolant; and

enclosing said deoxidized coolant with an inert gas in said cooling circuit.

- 5 16. A cooling system for a stack of fuel cells, said cooling system comprising:
- a coolant in accordance with any one of claims 1 to 13; and
 - a cooling circuit in which said coolant and an inert gas are enclosed.

54
a3

- 10 17. A method of decontaminating a coolant, said method comprising the steps of:
- preparing a water-containing base material;
 - preparing a rust-preventive additive that functions to keep an electric conductivity of said coolant at a low level and to maintain a hydrogen ion exponent of said coolant in a substantially neutral level; and
 - 15 removing deteriorating substances from a solution mixture of the base material and the rust-preventive additive with either one of an ion exchange resin and a chelating resin.